Academic help seeking as a process of seeking formative feedback on learning

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When learners need help, the literature on academic help seeking suggests that it is beneficial to reach out and ask others for help. More specifically, adaptive help seeking is considered a valuable self-regulated learning strategy in which learners seek help when they can no longer solve an academic problem on their own. However, much of the existing research on help seeking takes us to the point in the process when the student is asking for help—but how does help seeking translate into improved learning? How might different types of help seeking help students learn how to successfully navigate the learning environment? What roles do relationships with peers and teachers and their feedback play in this process? Research on assessment for formative purposes focuses on how the feedback received from teacher, peer, or self-assessment can be used to support and move forward learning. In this chapter, we aim to bring these two ideas together in order to conceptualize academic help seeking as a way in which learners seek formative feedback during the learning process, at a time when they need it the most, in order to progress in their learning.

We broaden what has traditionally been conceived of as learning, i.e., learning of academic content, to encompass students learning about the learning environment; the standards to which the student—and other students like them—will be held; skills, strategies, and values for learning; and what kind of support is available from their peers and teachers. Our main thesis is that academic help seeking should be integrated with the formative assessment process so that the potential benefits of help seeking on this learning can be realized for students. In doing so, this new conceptualization will help to highlight practical ways in which academic help seeking can become more adaptive and identify areas where further understanding is still needed, offering recommendations for future research in this area. In contribution to this volume dedicated to Stuart Karabenick, we draw from his extensive writings on academic help seeking throughout the chapter.

In the first section of this chapter, we review and critique the literature on academic help seeking. Initially viewed as a dependent behaviour, today academic help seeking is considered an adaptive learning strategy wherein students reach out to others to seek needed help. Extensive valuable research has considered contextual and motivational factors that influence learners' likelihood of seeking help and their different goals or types of help seeking (expedient or adaptive). While adaptive help seeking is generally considered a more desirable student behavior than expedient help seeking, we argue that both kinds of help seeking can work to support student learning in a classroom environment. Moreover, researchers conceptualize help seeking as a process that involves a number of steps or stages, yet there is less research towards the end of the process regarding how learners solicit help, how help "givers" such as teachers effectively interpret and process these requests and communicate useful help, and more generally, how learners process and interpret the help that they have received to move their learning forward.

In the second section, we review and critique the literature on assessment for formative purposes. Formative assessment is assessment that aims to develop learning as it progresses, typically by establishing where learners are in their learning process and where they are going next, and offering constructive or corrective feedback to help students know what needs to be done in order to progress (Black & Wiliam, 2009). The information gained from reviewing ongoing work or verbally checking for understanding can be used to let the learner know what understandings, skills, or competencies they are developing or still need to develop, and then feedback can be provided to help them move forward (Hattie & Timperley, 2007). However, when learners require feedback from others, what opportunities for agency do they have in this formative assessment? There is also the challenge of how feedback can be provided to all classroom learners in a timely, high quality, and useful way. Additionally, how can we overcome barriers to learners' use of feedback, for example, not understanding

the relevance of the feedback, not being emotionally prepared to process it, or lack of trusting relationship with the person giving feedback (Hill & West, 2019)?

In the third section of this chapter, we propose that the concepts of academic help seeking and formative assessment should be integrated because they have strong theoretical overlap, rely on similar processes, and have the same ultimate purposes to move forward learning. Using the concept of the Zone of Proximal Development (ZPD) from Vygotsky's (1978) sociocultural theory, we offer a theoretical model linking the concepts of academic help seeking and the formative assessment process. Both asking for help, and engaging in formative assessment, entail an interaction with someone else in the learning environment in order to move through the ZPD and develop one's knowledge and skills. Therefore, we argue that when learners seek help in order to progress in their learning, this process is comparable to the concept of an agentic learner soliciting formative feedback at the time when they most need it. However, the learner must be empowered and supported throughout the process and the different participants (e.g., teachers, peers) need appropriate skills and understandings to assess and provide feedback on where the learner is now, where they should be going next, and how to help them get there (Black & Wiliam, 2009).

In the fourth section, through reviewing and integrating these concepts of academic help seeking and formative assessment, we offer implications for practice to ensure that the potential benefits of help seeking for learning can be realized for students and raise some questions and empirical work still needed in this area. Recent research on dialogic feed-forward assessment (e.g., Hill & West, 2019) offers some practical applications that merge the concepts of formative feedback and academic help seeking. However, the empirical literature in both of these areas would benefit from more deeply exploring the interactions that occur between the learner/help seeker and the other/help giver in order for learning to effectively occur, a less understood yet vital element in the process (Karabenick, 2011;

Turner et al., 2002). We conclude this section with recommendations for research approaches to help address these questions.

In the final section of the chapter, we offer a remembrance of our former doctoral advisor, Stuart Karabenick, renown in the field of academic help seeking research.

I. A review of academic help seeking

Academic help seeking, and the factors that influence whether a student who needs help decides to seek help or not, are critically important for educators and researchers to understand because research suggests that those who need academic help the most are less likely to seek it (Karabenick & Knapp, 1988), creating a cycle whereby the "rich get richer" and the "poor get poorer" (Marchand & Skinner, 2007). We synthesise the valuable research in this area while also highlighting where more empirical work is needed, in order to postulate why we need to continue expanding conceptual thinking on academic help seeking. Throughout this section we draw on the important work of Stuart Karabenick, who conducted extensive research on academic help seeking throughout his career and continually expanding his own thinking in this area, for example, through linking academic help seeking with theories of resource management and information seeking (Karabenick, 2016).

Academic help seeking can be considered a specific behaviour, learning strategy, or process of seeking assistance from others in order to solve an academic problem or challenge or to accomplish a specific learning goal. While aspects of help seeking have long been explored in social psychology (e.g., Greenberg & Shapiro, 1971), help seeking research within the academic domain, that is, asking for help in a classroom setting with an academic problem or with a challenge in learning, emerged in force within the 1980s (Karabenick, 1987; Karabenick & Knapp, 1988; Nelson-Le Gall, 1981).

Academic help seeking is considered to be a self-regulated learning strategy that has both costs and benefits for the learner. Asking for help could potentially be felt as an act of

dependency, for example, those with a fixed mindset may think that seeking help suggests that one lacks the needed ability to complete the work on their own. Karabenick (1987, p. 1) proposed that a "culture's stress on individualism" and rewarding students for independent work are factors that can contribute to this stigma of academic help seeking. However, seeking help from others is a vital learning strategy when learners are unable to progress on their own, with need-contingent instrumental help seeking being shown across studies to be positively correlated with academic performance (Fong et al., 2021). Therefore, researchers now conceptualise academic help seeking as an important adaptive strategy within self-regulated learning (Newman, 2002). One challenge of considering academic help seeking as a self-regulated learning strategy, however, is that it is an intersubjective process that involves reliance on others rather than only the self, requiring a level of trust and relationship with the others from whom you seek help (Butler & Shibaz, 2014). Karabenick and Berger (2013) point out that going to others for help and resources that are needed to be successful is, in fact, still a self-directed form of learning and propose that there is general agreement among researchers that seeking help is a form of "behavioral" or "social" self-regulation, though the rise of help-seeking in online formats and through technological devices has challenged us to reconsider what defines a "social" behavior.

Academic help seeking is also typically viewed as a process of steps, stages, or decisions. There are a number of different models proposed. Drawing from Karabenick and Dembo (2011), learners engage in the following stages when facing academic problems and seeking academic help: (1) determining that a problem exists, (2) determining that help is needed, (3) deciding to seek help, (4) establishing the purpose or goal of the help being sought, (5) deciding who to seek help from, (6) soliciting the help, (7) obtaining the requested help, and (8) processing the help received. The model provides a helpful overview of the complexity involved in academic help seeking, and may also be helpful for planning

interventions to help learners to engage in more adaptive help seeking. Nevertheless, not all learners actually engage in each step or may not consciously consider each step, and furthermore, the decisions are not necessarily made in the order proposed. Decisions at some steps may influence others; for example, Makara and Karabenick (2013) argued that the perceived lack of availability or approachability of the person who one is deciding to seek help from may impact the initial decision to even decide to seek help in the first place.

One extensively studied area of academic help seeking research relates to the personal and contextual factors that influence academic help seeking, and largely this work focuses on the middle of the process: students' likelihood of seeking help or avoiding seeking academic help. Some personal factors that have been associated with academic help seeking include achievement goals, task values and expectancies, sense of relatedness, and use of other cognitive strategies (Marchand & Skinner, 2007; Zusho & Barnett, 2011). Some contextual factors associated with academic help seeking include classroom goals (Karabenick, 2004) and instructional climate, the degree to which a learning environment demonstrates teacher support and caring (Zusho et al., 2007).

Importantly, the work on contextual factors on academic help seeking begets an important point around equity. When learners do not have adequate social resources to seek help, such as frequent, low stakes contact with the teacher or peers, or face stereotype threat that they will be perceived as less able because they ask for help (Winograd & Rust, 2014), it is unjust to expect that it is fully students' responsibility to be self-regulated and seek help. Structural inequalities and systemic barriers such as a shortage of teachers from minority groups, shortage of experienced teachers, lack of resources to support neurodivergent learners, microaggressions, and gender-exclusive or transphobic language may disproportionately impact learners by race, ethnicity, gender identity, disability status, or socioeconomic status. Power imbalances between those who need help and those who can

offer help also impact help-seeking behavior; for example, several studies have explored how socioeconomic status and background influences motivation to seek or avoid seeking help and how cultural capital, stigma, and social group norms impact the help students receive from others (e.g., Laplante, 2014; Richards, 2022; Winograd & Rust, 2014).

Another important part of the academic help seeking process is the type of help that learners seek. Researchers typically distinguish between three types of help seeking (i.e., the learner's goal for the help seeking). *Adaptive help seeking*, also labelled as instrumental help seeking, is "asking for the help needed in order to learn independently, not simply to obtain the correct answer" (Newman, 2002, p. 132). Researchers suggest this includes "requests for clarification, explanation, or hints about the correct process or solution" (Ryan & Shim, 2012, p. 1123). In contrast, *expedient help seeking*, alternatively labeled as executive help seeking, is a dependent behaviour, defined as "instances in which the student's intention is to have someone else solve a problem or attain a goal on his or her behalf" (Nelson-Le Gall & Glor-Scheib, 1985, p. 59) where the goal is essentially to just get the answer quickly. Finally, *avoidant help seeking* is generally defined as avoiding going to others to ask for help when it is needed. Notably, academic help seeking has been argued to be an adaptive self-regulated learning strategy only when students engage in adaptive help seeking, that is, asking for help only when it is needed and not soliciting the answer.

However, the relative "adaptiveness" of each type is rarely challenged. As Nelson-Le Gall and Glor-Scheib (1985) pointed out, executive help or "ready-made solutions" can sometimes be useful, although overreliance could lead to dependence upon others to the detriment of one's independent learning. It may be strategic, for example, for a student who has completed a task to seek quick answers to check one's understanding. It may also be strategic, for different reasons, for a student who has not completed a task to try out an expedient help request. The teacher's response to these typically "unfavorable" expedient

help requests provides students valuable information about the teacher's expectations for independent problem-solving and what kind of support they can expect, important factors that can influence the degree to which students engage in self-regulated learning and what kind of help, if any, is sought in that environment and with that teacher (Turner et al., 2003). Supporting this assertion, qualitative research has revealed that in addition to traditional types of help seeking, learners with additional support needs also ask for help in the form of confirmation-asking or organizational questions (Zorn & Puustinen, 2022), and another study suggests four types of help seeking: procedural help, proofreading/comparing help, factual information, and executive help such as copying (Laplante, 2014). Since students are likely to seek the help others are willing to give, additional research is needed, potentially drawing upon more diverse forms of analysis, to explore more deeply the various types of help learners ask for, how one's peers or teachers interpret these requests and what forms of help they provide in return, and how the process of help-seeking evolves in an environment over time.

Generally, there is much less research towards the end of the help seeking process (Karabenick & Dembo, 2011), regarding how learners actually solicit help, how help givers such as teachers or peers process these requests and determine what type of feedback to give, and how learners process the help received. One exception is Veenman et al.'s (2005) experiment on how help is given, whereby teachers in the experimental condition who encouraged productive help-giving behaviours among students (e.g., listen to what is needed, give explanations rather than an answer, give specific feedback) resulted in students with more positive help seeking and help giving in the classroom. As another exception, Puustinen et al. (2009) explored the format of messages that young people used when seeking academic help online, uncovering that older students provide more contextual information and more explicit requests when needing help compared to younger students.

Arguably, it can be challenging for learners to know what help they actually need that would be useful for their learning and how to articulate their request. Sometimes, it may be easier just to say, "I'm stuck and I need help." Therefore, teachers need significant pedagogical content knowledge as well as an orientation towards building relationships with students (Butler & Shibaz, 2014) to effectively interpret students' requests for help, diagnose students' stated and unstated needs, and give useful help. Additionally, we do not have a great deal of understanding of how the help received is then processed by the learner to move their learning forward, a crucial yet not well understood aspect of the process. What is needed to ensure that academic help seeking leads to learning is therefore a deeper understanding of the motivations, knowledge, and skills needed by: 1) the help giver to effectively interpret what help is needed and provide useful feedback regarding these requests for help, and 2) the learner to be able to process the help or feedback that was received and apply this information to independently move forward. We find productive answers to these questions in the formative assessment and feedback literature.

II. A review of assessment for formative purposes

This section reviews the concept of assessment used for formative purposes and considers how to move forward research and practice in this area. Educators sometimes distinguish between formative assessments as learning activities or assignments which serve as an opportunity to get feedback during the learning process, and may not contribute directly to the grade in the course, and summative assessments as learning activities or assignments which demonstrate the extent of mastery of the material and typically contribute to the course grade. However, within the field of assessment, the distinction between formative and summative assessment may better refer to *purposes* of assessment and not to *forms* of assessment (Dolin et al., 2018). Any one form of assessment can be used for either formative or summative purposes, or for both. The purposes of formative assessment are to *develop*

learning, to improve teaching and learning, and to diagnose student difficulties, whereas the purposes of summative assessment are to *demonstrate* learning, to evaluate learning outcomes and help make placement or promotion decisions (Dixson & Worrell, 2016).

In their foundational article on formative assessment, Black and Wiliam (2009, p. 21) discuss the importance of formative assessment as a way to support learning and "change the reasoning resources that a learner might bring to a future task." Formative assessment can take on either spontaneous or planned forms (Dixson & Worrell, 2016). Whether it be self-assessment, peer-assessment, or teacher-assessment, the information gained from reviewing ongoing work or checking for understanding can be used to let the learner know what understandings or skills they are developing or still need to develop, and then feedback can be provided to help them move forward (Hattie & Timperley, 2007). Critically, assessment does not lead to future learning except when feedback is provided and reflected upon by the learner. Therefore, in this chapter, we refer to the "formative assessment process" as including both the formative assessment and the feedback which is provided to the learner. Similar to the goal of adaptive forms of academic help seeking, the formative assessment process aims to "contribute to helping students to become independent, responsible and effective learners" (Black, 2015, p. 171) and therefore encourages students to become increasingly self-regulated learners.

Researchers have identified processes that shape the effectiveness of assessment feedback in its efforts to be formative for learners. Hattie and Timperley (2007) summarised a large meta-analysis suggesting that feedback is a powerful factor influencing academic achievement, with the most effective forms being feedback that summarises information about a task and how to do it more effectively, that provides cues or reinforcement, and that is related to learning goals. They also report that feedback is especially useful when it is in the format of video, audio, or computer-assisted feedback. An additional research synthesis

found that giving written feedback on its own is superior to giving feedback along with a grade in terms of increased internal motivation and future performance, and that "task-focused" comments are superior to "global affective" comments (Koenka et al., 2021). Effective feedback for formative purposes needs to contain information related to 1) the learning goals, 2) what progress is being made towards these goals, and 3) what activities are needed to make better progress towards these goals (Hattie & Timperley, 2007).

In order for formative assessment to be formative in nature and for teachers to provide feedback that includes the three elements proposed by Hattie and Timplerley (2007), a number of important conditions must be met by the person offering feedback. As persuasively argued by Harlen and James (1997), to support deep learning (i.e., developing understanding, relating new ideas to previous knowledge and experience, integrating concepts), the instructor or teacher needs to have a clear understanding of the subject matter and how students are likely to learn it or difficulties they commonly face; an understanding of how learners progress in their ideas and skills in this area; a recognition of the point in this development where the learner currently is; and the ability to use different strategies to find out where the learner is in their development and to help further develop their learning. In addition, teachers must develop a nuanced understanding of the prior knowledge that a student brings to the subject area and the characteristics of the learner, and consider these when they craft and deliver the assessment and feedback (Butler & Shibaz, 2014; Otero, 2006). In this way, facilitating the formative assessment process is a critical part of being an effective instructor or teacher that requires pedagogical content knowledge, knowledge of students, an orientation towards building relationships with students, and feedback literacy.

While this provides a strong basis for offering feedback, an area requiring additional research is the challenges around receiving feedback. How can we overcome the known barriers to some learners' use of feedback; for example, learners not understanding the

relevance of the feedback, not being emotionally prepared to process it, or lack of trust in the person giving feedback (Hill & West, 2019)? As Harlen and James (1997) note, learners ideally should be active in their own learning and only through coming to understand their strengths and weaknesses as a result of the formative assessment process, and how they might deal with these strengths and weaknesses and move forward, will they be able to progress in their learning. Similarly, teachers need opportunities to get to know learners' individual differences and needs and to seek elaborative information from students beyond what students provide on a given assessment. Therefore, as many researchers have argued, rather than feedback being provided and a learner left to passively interpret the feedback on their own, a dialogue may be required for assessment to be actively engaged with by the learner and to be truly formative in nature (e.g., Nicol, 2010; Steen-Utheim & Wittek, 2017).

Dialogic feedback has therefore emerged as an important feature to feedback that supports successful learning and teaching. Feedback, especially in a written form, is dialogic when the activity is shared across teachers and students and when the feedback is adaptive, discursive, interactive, and reflective (Laurillard, 2002, as cited in Nicol, 2010). More broadly, some researchers have defined dialogic feedback as "all dialogue to support learning in both formal and informal situations" (Askew & Lodge, 2000, p. 1, as cited in Yang & Carless, 2013). Feedback can be offered dialogically in several ways, including feedback in the form of cycles of guidance throughout a course, encouraging peers to give feedback on each other's work, technologically-supported feedback such as giving audio or video feedback, developing students' ability to engage in self-dialogue, and dialogic written feedback (Carless, 2016). An added benefit of dialogic feedback is deepening the sense of trust/relationship between student and teacher, a critical component of effective teaching, particularly of minoritized students (Baysu et al, 2021; Butler & Shibaz, 2014).

However, when learners require a more expert other (an instructor, or a peer) to provide them with needed feedback, what opportunities for agency do they have in assessment in the classroom? Often, assessment for formative purposes becomes an instructor or teacher-led activity, and is initiated by educators at the time when they feel it would be most useful for offering feedback that helps move learning forward, or more practically, at a time when it fits into a class or course. Also, the educator typically chooses what to observe or collect for assessment and what type of feedback to give. However, each learner's need for feedback might be at a different time, and the nature of how to best assess students' current understanding or skills, and what types of assessments to use and what type of feedback they need, may differ across students depending upon their own learning strengths and challenges. For example, students who have missed significant periods of schooling may need a diagnostic assessment method that can help poinpoint any missing skills or understandings, perhaps supported with online adaptive instruction as well as opportunities for learners to voice their own concerns and select areas where they need additional support. Additionally, Carless (2016) identified institutional barriers such as large class sizes, student barriers such as lack of appropriate self-reflection on feedback, and teacher barriers such as lack of assessment and feedback literacy (e.g., considering feedback as a form of summative grading). Empirical questions remain regarding how teachers, and the educational systems they work within, can be supported to ensure feedback is provided to all learners in their classroom in a timely, high quality, and useful way that supports agency and learning.

There is also a need in the field to more closely examine the role learners can or should play in letting others know when they would benefit from additional feedback and support. Student-led questions (Stead & Poskitt, 2010), or students telling the teacher what aspects they would like feedback on (Carless, 2016), are more likely to result in an interaction that is autonomy and relationship-supportive, and that is formative (i.e., leads to

learning) than teacher-led questions. Additionally, cooperative learning, in which learners become interdependent while working on sufficiently challenging learning tasks, has been shown to foster student autonomy and self-regulating behavior (Scager et al., 2016), and is therefore one rich area in which to investigate how students seek, provide, interpret, and use assessment and feedback from their peers in the learning process (e.g., Veenman et al., 2005). Research conducted in the area of academic help seeking may help to provide a key towards understanding how, when, and why learners may actively seek information, or avoid seeking this feedback, at a time when it is needed, and combined with research on formative assessment, could leverage strong benefits for learners.

III. Conceptually integrating academic help seeking and formative assessment

In this section, we propose that the concepts of academic help seeking and formative assessment should be integrated because they have meaningful theoretical overlap in their processes and purposes of moving forward learning. Stead and Poskitt (2010) proposed that adaptive help seeking specifically provides an opportunity for interactive formative assessment. Similarly, Fletcher (2018) conceptualised help seeking as a form of agency among learners through initiating feedback at a time when they are most receptive. Expanding upon these ideas, and using the concept of the Zone of Proximal Development (ZPD) from Vygotsky's sociocultural theory, we identify similarities and theoretical links between academic help seeking and assessment used for formative purposes.

As summarised in Table 1, academic help seeking and the formative assessment process overlap substantially in their purposes, who and what the interactions involve, their modes, what the learners and other(s) get out of the process, and in their challenges. Both involve a learner who is interacting with another person to provide them with information that gives them a sense of where they are in their learning trajectory and how they can best move forward. For example, consider a student who is having difficulty in understanding

how to be critical when reviewing literature for a paper they are writing. They may ask their teacher for an adaptive form of help on how to be more critical, and the teacher could potentially respond by offering advice on different strategies they may use to more critically read and write about the literature. In terms of assessment for formative purposes, a teacher may collect part of a draft of a paper from the student. They may identify that the student could be more critical when reviewing literature, and again, potentially respond by offering some advice or different strategies that the student may use to more critically read and write about the literature. In both cases the aim is to support learning.

Table 1. *Comparing Academic Help Seeking and Assessment for Formative Purposes*

	Academic Help Seeking	**Assessment for Formative Purposes**
Purpose	To receive information to support the learner to move forward in their learning	To provide information to support the learner to move forward in their learning
Typically initiated by	The learner; occurs in interaction with other(s) (teacher, peer, etc.)	The teacher; although also can be initiated by peers in peer assessment and the self in some forms of self assessment
What it involves	An interaction that typically starts with a request or question initiated by the learner and then a response from the other(s)	An interaction that typically starts with collecting and receiving some information from the learner (through a more formal piece of work, informal observation, etc.) and then a response from the other(s)
Benefits for the learner	Information regarding what/how they may go about thinking/doing something differently, strategies they could try, or information that helps them feel more confident that they were already heading in the right direction	Information regarding what/how they may go about thinking/doing something differently, strategies they could try, information of what they are doing well, and information that helps them feel more confident that they are heading in the right direction
Benefits for the 'other'	Insight into what challenges the learner is facing, which may inform practice; for peers, an opportunity to reflect upon their own knowledge as an outcome of help giving	Insight into what challenges the learner is facing, which may inform practice; for peers, an opportunity to see their peer's work and reflect upon the criteria for what makes "good" work

Modes	Help can be sought and given in a range of forms (written, verbal, visual, etc.)	Assessment and feedback can be given in a range of forms (written, verbal, visual, etc.)
Challenges	The learner may not ask for help when it is needed, other(s) may not give useful help, the learner may not use the help, learners' conceptions of where they need help may be inaccurate or misaligned with learning goals	The assessment may not be offered at a time that is useful, other(s) may not give useful or valued feedback, the learner may not understand the feedback or may not choose to use the feedback

Importantly, both concepts align closely with Vyotsky's sociocultural theory of learning, in that they involve a learner who is at a point in their journey of learning when getting feedback from another provides them with information that gives them a sense of where they are in their learning trajectory and how they can best move forward towards being able to work independently. As noted by Nelson-Le Gall (1981), adaptive forms of academic help seeking from others in order to acquire skills in learning aligns with Vygotsky's view that learning first develops on a social level, and then through interacting with others, learners internalise the supportive "other" role and can begin to perform actions for themselves.

Vygotsky's (1978, p. 88) sociocultural theory suggests that learning "presupposes a specific social nature and a process by which children grow into the intellectual life of those around them", in other words, that learning is inherently social. He argued against notions of teaching strictly aligned with one's developmental level and instead proposed that it was more effective to meet the learner at the point where they need to advance next in their learning, that is, the point where they need support from others. In line with this, a central part of Vygotsky's theory was referred to as the Zone of Proximal Development. This concept proposes that learning takes place in a zone between what a learner cannot yet do and what they can do independently. Between these two zones is the Zone of Proximal Development (ZPD), which is what the learner can do with support and guidance from others,

or what was originally termed a "More Knowledgeable Other." A more contemporary extension of Vygotsky's theory, a situated model of learning, discusses how knowledge is socially constructed through collaborative efforts, embedded in the culture, and draws from artifacts provided by the culture, taking a contextual perspective on how social interactions (such as help or feedback received from others) leads to learning (Daniels, 2016).

Another important similarity between academic help seeking and formative assessment is the wide range of potential benefits and costs involved in the process of seeking and receiving information. Receiving adaptive help, or getting high quality formative feedback—for example, being told a strategy that one could use to address a particular learning challenge—may help the learner both in the immediate situation and also how to solve similar problems in the future. The information that is received from these processes may lead to a deeper understanding of concepts or skills, ideas about learning strategies that they could try, more adaptive motivation or emotions around the learning task such as increased confidence or encouragement, and directly or indirectly, increased performance on future learning tasks. However, just as Karabenick and Gonida (2018) point out that help seeking can feel costly due to a learner's fear of looking incompetent or feeling indebted to the help giver, feedback received after assessment can feel threatening especially if it is perceived by the learner as a personal failure or confirmation of a negative academic stereotype related to a student's social identity (Hattie & Timperley, 2007; Winigrad & Rust, 2014). It can be intimidating to submit one's work to an instructor or peer to receive their feedback, especially if the learner attributes negative feedback as an indication of their own lack of ability. While both help and feedback can be given privately or publicly, there is often less structure around help seeking; for example, a learner may only have the opportunity to seek help in the context of their peers, which may be embarrassing for some. These interpersonal educational interactions with others can be very challenging and are laden with

unique benefits and costs to each learner. A model integrating these concepts therefore needs to address the social-affective dimensions of learning.

Although sharing similarities, a significant difference between academic help seeking and assessment for formative purposes, as can be seen in Table 1, relates to who typically initiates the process. Typically, academic help seeking is not planned by a teacher but rather initiated by the learner at a time when they identify a need for help, whereas formative assessment is typically initiated by the teacher at the time when they think learners may benefit from feedback to move forward their learning. Even collaborative learning activities that encourage spontaneous formative feedback from peers tend to initially be teacher-led. In the case of academic help seeking, the learner typically identifies what they think they need help in, and in the case of a formative assessment process, the teacher traditionally has identified what they think is an area the learner needs help in. In practice, however, there is no guarantee that both the learner and teacher would necessarily identify the same things. Considering the two different processes, it raises a question of who should have responsibility for learning, addressed further in a later section. For comprehensive support to move forward learning, it may be most helpful to know what both the learner thinks they need help with *and* what the teacher or peer thinks could be improved.

Because of the similarities in the purposes of help seeking and formative assessment processes and the importance of considering the contexts in which they happen, we propose a theoretical model, shown in Figure 1, that synthesizes this theoretical overlap and adds nuances of the social nature in which they both occur. There are three important elements to our model. One, it acknowledges that both academic help seeking and formative assessment processes incorporate Vygotsky's concept of the ZPD and the idea of learning as a process of development from not being able to do something, to doing something with support and guidance from another, and then to doing something on one's own. Two, because it sits

within the ZPD, our model incorporates how academic help seeking and assessment for formative purposes involve an interaction between the learner and the teacher/peer/other to help move the learner towards being able to do something on their own. Three, it acknowledges that academic help seeking and formative feedback are impacted by myriad factors that shape the extent to which they are successful in this goal of moving forward the learner.

Figure 1. *An integrated theoretical model of academic help seeking and the formative assessment process within the Zone of Proximal Development*
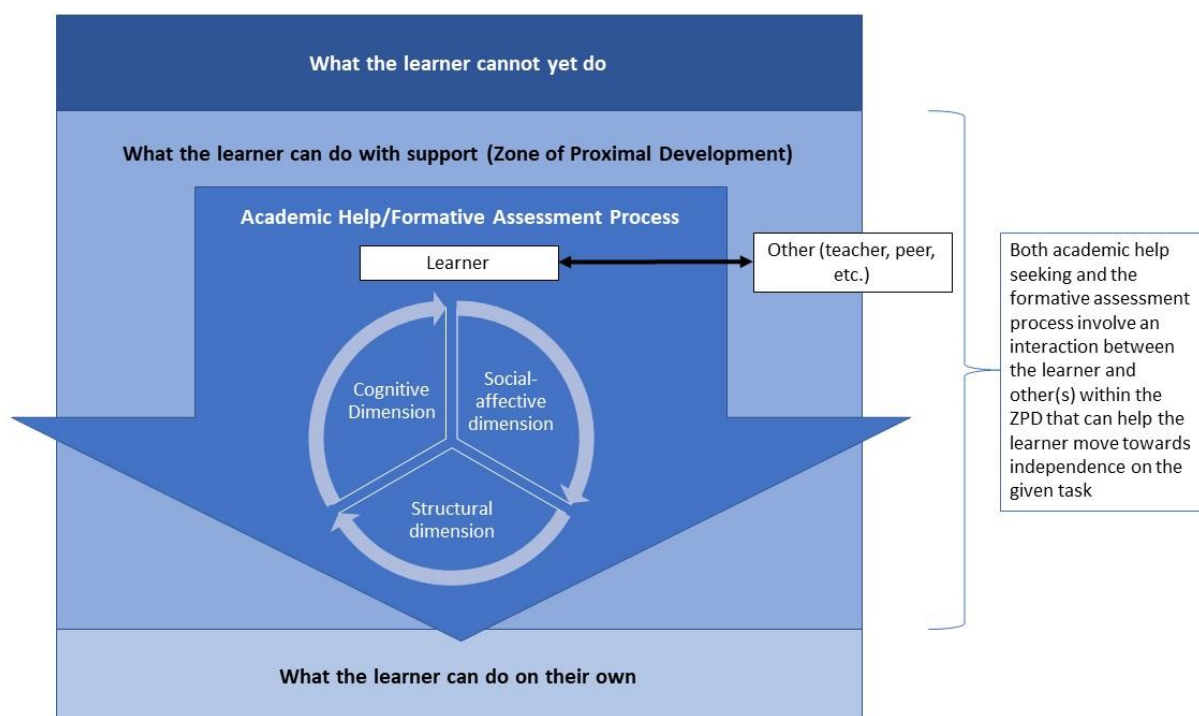
In order to acknowledge the complex factors that shape the effectiveness of both feedback and academic help provided to the learner, we incorporate Yang and Carless's (2013) feedback triangle into the model. Yang and Carless (2013) propose that there is a *cognitive* dimension (content of feedback), *social-affective* dimension (social and interpersonal negotiation of feedback), and *structural* dimension (the organisation and

management of feedback) of feedback which interact with one another and need to be considered together in order for feedback to be formulated effectively for learners. For example, how feedback is managed within the structural dimension could either be a barrier or facilitator of the effectiveness of feedback (e.g., teachers who have too high of a workload may not have the capacity to provide in-depth personalised feedback to each student). This feedback triangle conceivably extends equally well to the concept of help seeking and giving. Within academic help seeking, one can consider the content of help given to the learner, the social and interpersonal challenges and negotiations involved in asking for and receiving help, and the organizational support (or lack thereof) for the help seeking process. Therefore, the interplay between these dimensions, during the process of formative assessment and help seeking, influences the extent to which responses from other(s) may help move the learner forward through the ZPD towards independent learning on a given task.

IV. Implications for Practice and Research

We have argued that conceptually integrating academic help seeking and formative assessment will move both fields conceptually forward; here we propose how teachers can link these concepts in practice and integrate dialogic practices to advance student learning.

Implications for Pedagogy and Assessment

As highlighted in the previous section, one of the biggest differences between academic help seeking and formative assessment is who typically initiates the process. This raises important questions about who has or should have responsibility for the learner's learning. However, through integrating academic help seeking and formative assessment more closely in practice, responsibility becomes shared between the learner and other(s). This can be accomplished in several ways. For example, when making arrangements for assessment for formative purposes, the teacher or instructor can ask the student, in advance, to highlight areas where they would especially like feedback (essentially, encouraging help

seeking) which shifts some responsibility onto the learner. When a student asks for help with something, the teacher can respond by asking them to provide some examples of what they have tried already so that they can then better assess where the learner is currently in terms of their knowledge/skills and then offer more targeted help (essentially, bringing in some informal formative assessment) which shifts some responsibility onto the teacher.

Therefore, in an authentic open dialogue when learners are able to discuss a problem or challenge in depth with the teacher or instructor, and when the learner and teacher can ask follow-up questions of each other, the lines become blurred between adaptive help seeking and the formative assessment process. In this case, both the learner and teacher can evaluate more deeply what misconceptions the learner may have and where they may be in terms of their knowledge and skills, and both the learner and teacher can clarify what feedback or advice is provided, sharing the cost of initiating the feedback process between students and teachers. Ultimately, through a shared dialogue that, ideally, regularly occurs in low stakes settings, the interaction becomes an exchange of information to support the learner to move forward in their learning, or to shift the Zone of Proximal Development forward. In this way, integrating these concepts in practice helps both learners and teachers to have a shared sense of responsibility and agency in the process of ensuring that the potential benefits of learning can be realized for students who need help. As an empirical example, Fletcher (2018) implemented an instructional project for primary students based on the concept of Assessment for Learning, which prompted student agency and active help seeking, and in turn supported teachers in offering targeted formative feedback to small groups of learners, leading to a reciprocal relationship between the student and teacher. The importance of low stakes, frequent, reciprocal dialogue in teaching has been well-established in specific subjects, e.g., reading (Palincsar & Brown, 1984), which provide valuable insight into how disciplinary conventions impact the type of feedback given and dialogue initiated.

However, as pointed out by Black (2015), most practices that follow innovations in dialogic feedback create extra work for educators and cannot be useful unless they are also practical for teachers to implement. There are a number of tools already available that make links between students' need for help and offering effective feedback, but the practical challenge in this area is how to ensure open dialogue, especially in large classes within higher education (see Nicol, 2010 for suggestions for improving written feedback in large university courses). Fortunately, there are a range of assessment practices and tools available to educators that might help create spaces for open dialogue and feedback while mitigating the burden on both educators and students.

In recent years—and particularly with the shift to remote learning during the COVID-19 pandemic—teachers and instructors have increased access to and familiarity with assessment data and assessment tools that encourage evidence-driven instruction and have the potential to create more equitable spaces for both help seeking and feedback. Learning analytics dashboards provide instructors with detailed information on not just *what* students learn but *how* they interact with learning resources, and research on how interaction with these platforms affects students' motivation and self-regulated learning is burgeoning (e.g., Aguilar et al., 2021). For asynchronous learning and assessment, Perusall is a social reading tool developed by Eric Mazur that allows students to have asynchronous discussions about course texts (similar tools exist for video content, e.g., VoiceThread). Students can make a variety of comments at key points in the text, including asking clarifying questions, and other students or the teacher can respond to those questions through threaded discussions. This tool and others like it (e.g., Hypothesis) automatically synthesize student comments and integrate with the teacher's learning management system to relieve some of the extra management burden entailed in a classroom centered around dialogic formative assessment. Many of these tools, therefore, are *cognitive* tools that provide teachers with organizational and management

structure and provide *social-affective* opportunities (e.g., emotional reassurance for students who realize that other students have similar thoughts or questions, too). Moreover, many of these tools provide more autonomy and flexibility to students in how they contribute to the discussion, such as the ability to leave voice or video comments, reflecting principles of multimodality inherent in universal design for learning (Tobin & Behling, 2018). Importantly, however, the use of these tools should remain focused on individuals' own progress in learning, rather than becoming used as tools for comparison between peers, in order to remain formative in nature.

Real time assessment tools provide in-class opportunities and structures for formative assessment processes and help seeking. Student response systems such as Kahoot!, PollEverywhere, and iClicker allows teachers and instructors to collect real time assessment data from all students which can help the teacher adjust instruction in real time, e.g., pause to open up a dialogue to resolve confusion or give further practice. Backchannel chat rooms and messaging spaces on video calls allow students to initiate the help seeking process in less intimidating ways (compared to raising one's hand in a classroom). Many of these pedagogical strategies enabled by technology can also be accomplished without technology; yet, offering students a variety of forms in which they can communicate how or what they understand with the teacher can reduce the threat of help seeking (Makara & Karabenick, 2013). Moreover, offering multiple methods of communication makes teachers more approachable and accessible, a critical first step towards building relationships that foster open dialogue between teachers and students. As frequent, informal assessment becomes more integrated into the classroom and dialogue around those spaces is increased, the line between assessment, teaching, and learning blurs: a blurring we would argue is optimal for moving student learning forward.

Recommendations for Future Research

As previously mentioned regarding academic help seeking, there are different types or goals for help seeking, such as instrumental, expedient, or avoidant help. Less studied in this area are other potential forms of help that may be sought, and to what extent the help provided aligns with the type of help that is requested, which would be a useful area for additional future research. Similarly, in research on formative assessment, it would be practical to study the various potential forms of feedback that are given, and to what extent different types of feedback may be useful to support an individual's learning. An analysis of dialogue between learners and educators may uncover a range of different types of questions that learners ask their teachers, and different forms of help and feedback that are in turn provided to the learner. What is considered "adaptive", for whom, and in what instructional contexts and disciplinary areas, may vary greatly and warrants further study, as well as the extent to which students might be motivated by or might realize other goals through the outcomes of their help seeking behavior, such as relationship building or assessing the supports available to them in their environment.

In the empirical literature on academic help seeking and on assessment for formative purposes, there also appears a need to more deeply explore the interaction itself that occurs between the learner/help seeker and the other/help giver in order for learning to effectively occur, a less understood yet vital element in the process (Karabenick, 2011; Turner et al., 2002). Even after engaging in practices such as dialogic feedback, just because a teacher and learner are communicating does not guarantee that learning has occurred. Are there more or less effective ways of asking someone for help? How do peers and teachers interpret a learner's call for help and respond, and do teachers and peers who offer help and feedback have a conceptualization of what matters for learning in that particular subject area, and how do they respond or offer feedback? Furthermore, when exploring how feedback can achieve its aim of moving forward learning, researchers need to engage with the learning trajectories,

or learning progressions, that are unique to each subject area (see Furtak, 2012, for an example of progression within the scientific concept of natural selection).

Related to the need to more deeply understand the interactions that are occurring, we can draw from some contemporary adaptations of Vygostky's original theory. Researchers such as Fernandez et al. (2001) reconceptualize scaffolding within the context of collaborative learning to acknowledge a symmetrical version (rather than asymmetrical relationship between the learner and "more knowledgeable other") in which language used during collaborative group processes in dynamic and dialogical to develop learning. Similarly, research in the area of collaborative learning sheds light on how learners naturally incorporate help giving and formative feedback as part of collaborative learning activity (e.g., Puustinen et al., 2009). Additionally, there remain some questions around the extent to which the "other" within the ZPD is actually an individual with whom the learner interacts (Daniels, 2016)—with research needed on the help and feedback available online or offered through carefully structured educational software programmes or even through AI.

As a field, we would benefit from broadening our methods in order to engage in both the broad-scale and in-depth analyses needed to answer the questions raised throughout this chapter around academic help seeking and formative assessment. Research on academic help seeking largely relies upon self-report questionnaires, which are useful for uncovering perceived and subjective experiences of academic help seeking. However, these could be complemented by other methods, which sometimes require us to focus on fewer learners, situated within a more specific context, and to engage in more in-depth analysis for each learner or classroom setting. Perhaps starting with situative approaches to analysis and moving towards identifying more general patterns, we can then better support interventions for practice. For example, Zorn and Puustinen (2022) analyzed videos of help seeking and help giving among 17 students and their teachers in everyday classroom settings to uncover

new help seeking and help giving categories. Some methods used in the field of dialogic feedback are also promising, such as interaction analysis used by Steen-Utheim and Wittek (2017), who used a range of recordings, notes, assessment templates, and observations to analyse a comprehensive and longitudinal set of data from 11 learners engaged in dialogic feedback with their teacher, uncovering nuanced descriptions of four "potentialities" of how meaning was created to support student learning.

V. In Remembrance of Dr. Stuart Karabenick

This chapter is dedicated to our advisor, Dr Stuart Karabenick, who guided us through our Ph.D. journeys while we were doctoral scholars in the Combined Program in Education and Psychology at the University of Michigan. Stuart was a supportive mentor who was adept at bringing together people and ideas and inspiring others to be open to opportunities. Stuart was also a major contributor to research on academic help seeking, having led and contributed to numerous studies on help seeking spanning multiple decades (e.g., Karabenick & Knapp, 1988; Karabenick & Knapp, 1991; Karabenick, 2004; Gonida et al., 2014, Aguilar et al., 2021), as well as a number of significant academic books and chapters on academic help seeking (e.g., Karabenick, 2020; Karabenick & Berger, 2013; Karabenick & Puustinen, 2013; Karabenick & Gonida, 2018). His research on academic help seeking linked the fields of self-regulated learning and motivation. There are many remaining questions and directions for future research to be explored in this field that will build upon his strong foundation of conceptual thinking and research on academic help seeking. In this dedication, we wish to note how his scholarly achievements in the field continue to inspire our own conceptual thinking.

Our current chapter builds upon Stuart's efforts to conceptualise academic help seeking as a self-regulated learning strategy that links naturally to motivation. In 2016, Stuart gave a keynote speech at the International Conference on Motivation, where he included a

discussion of the "special case of help seeking" as a dual motivation self-regulated learning model, and also linked academic help seeking with the information sciences through the idea that help seeking could be viewed as information and resource management. Several years later, in his keynote address at the 2019 European Association for Research on Learning and Instruction, Stuart argued for a new focus on how we think about the relationships between motivation and the use of self-regulated learning strategies. Similarly, in this chapter, we aimed to link academic help seeking to another concept, formative assessment, to consider more deeply how information is sought and shared between learners and educators. As Stuart (2020, p. 11) noted in one of his last pieces of writing about academic help seeking and technology, "I have stressed that point to those developing help systems, reminding them that such systems do not operate in a vacuum but rather are connected to and potentially influenced by the instructional context in which they are employed." In this chapter, we expanded more deeply into the instructional context in which academic help seeking occurs, exploring the role of both the learner and the teacher, and the theoretical and pedagogical overlap between academic help seeking and assessment for formative purposes.

It is difficult to select one piece of advice among the great number of lessons he offered, but we especially appreciate Stuart's (2020) guidance to "explore other disciplines and ways of working" in his *Education Review* Acquired Wisdom Series reflection. Stuart demonstrated academic courage through exploring new ideas, offering critique, looking for connections across different fields, and through being open to digging into the conceptual complexities that looking for such connections brings. Inspired by Stuart, in our own work we aim to make connections across different fields with the ultimate goal of supporting students' motivation and learning.

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